

OWNER'S MANUAL

MFG. NO. 775 ELECTRIC START WONDER-BOY 315 W/26" MOWER
MFG. NO. 774 MANUAL START WONDER-BOY 315 W/26" MOWER

SIMPLICITY MANUFACTURING COMPANY, '7

1684 #

SER. FORM - OP7
LITHO IN USA

SAFETY PRECAUTIONS TO PROTECT YOURSELF AND OTHERS

OPERATION

Know the controls and how to stop quickly - **READ THE OWNER'S MANUAL.**

Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction.

Do not carry passengers. **KEEP CHILDREN AND PETS A SAFE DISTANCE AWAY.**

Clear work area of objects which might be picked up and thrown.

Take all possible precautions when leaving vehicle unattended; such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.

Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; never across the face.

Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

Stay alert for holes in terrain and other hidden hazards.

Use care when pulling loads or using heavy equipment.

- A. Use only approved drawbar hitch points.
- B. Limit loads to those you can safely control.
- C. Do not turn sharply. Use care when backing.
- D. Use counterweight (s) or wheel weights when suggested in owner's manual.

Watch out for traffic when crossing or near roadways.

Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.

Do not alter basic engine governor settings or overspeed engine.

Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.

FUEL AND FIRE HAZARDS

Handle gasoline with care -- it is highly flammable.

- A. Use approved gasoline container.
- B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.

C. Open doors if engine is run in garage -- exhaust fumes are dangerous. Do not run engine indoors.

Never store equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark.

Allow engine to cool before storing in any enclosure.

To reduce fire hazard keep engine free of grass, leaves or excessive grease.

ATTACHMENTS

Disengage all attachment clutches and shift into neutral before attempting to start engine.

Disengage power to attachments and stop engine before leaving operator position.

Disengage power to attachment (s) and stop engine before making any repairs or adjustments.

Disengage power to attachments when transporting or not in use.

When using any attachments never direct discharge of material toward bystanders or allow anyone near vehicle while in operation.

Keep vehicle and attachments in good operating condition and keep safety devices in place. Use guards as instructed in owner's manual.

Vehicle and attachments should be stopped and inspected for damage after striking a foreign object and the damage should be repaired before restarting and operating the equipment.

When using vehicle with mower:

- (1) Mow only in daylight or in good artificial light.
- (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
- (3) Shut engine off when unclogging chute.
- (4) Check blade mounting bolts for proper tightness at frequent intervals.

Stop blades when crossing gravel drives, walks or roads.

If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.

SIMPLICITY'S NEW EQUIPMENT WARRANTY

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (45 days for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. **THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE.** The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

BRIGGS & STRATTON 5 H.P. KOOL-BORE ENGINE with compression-relieved Easy-Spin starting. Horizontal crankshaft plane and upward angled side pull recoil starter designed for easy, natural motion.

CONVENIENT HAND-OPERATED CONTROLS. Gear shift, throttle and mower clutch lever are all located near the seated operator. The seat helps shield the levers from snagging on bushes and branches.

LARGE, CENTER MOUNTED STEERING WHEEL, provides effective leverage and extra personal support on slopes. Simple draglink 1-to-1 ratio steering features true geometry design. The front wheels follow different arcs when turning; eliminates wheel marks and improves steering.

TRANSMISSION. All spur gear, fully enclosed and lubricated. Two speeds forward, one reverse. Differential allows each rear wheel to rotate at required speeds when turning.

COMBINED CLUTCH AND BRAKE PEDAL with heel support. Start, turn and stop with smooth roller action and no wheel skid. Improved Touch-O-Matic clutch converts any transmission speed from zero to maximum for precise "inching" and turning speed. No need to "downshift" on turns.

26 IN. ROTARY MOWER.

Front axle mounted to automatically follow ground contour. Deep deck, height above blade in clipping channel area increased from 2-1/2" to 4". Deck 4" deep above blades for even dispersal. 3-1/2" dia. rubber rollers at the rear and two-pin attachment for easy removal. Cushioning belt drive absorbs shocks. Sealed bearings on mower spindles.

CHASSIS. Short wheel base, large low-pressure tires, footrests on front axle. Open frame for easy dismantling. Low center of gravity. Seat is adjustable to 2 positions. Oversized, reinforced frame pivot joint between front and rear wheels.

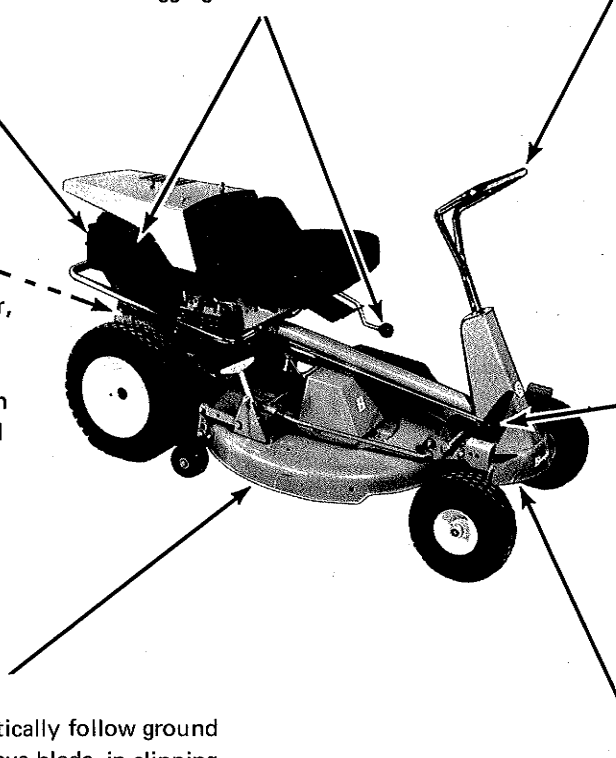


TABLE OF CONTENTS

MOW SAFELY	4
STEERING WHEEL	4
SEAT	4
CONTROLS	4
BEFORE STARTING	5
STARTING	6
BEFORE OPERATING	6
OPERATION	7
MOWING PATTERN	8
TROUBLE SHOOTING	8
ADJUSTMENTS	9
MAINTENANCE	11
OFF-SEASON STORAGE	14
PARTS LISTING	15

ENGINE

Make	Briggs & Stratton
Model No.	130202 and 130207
Horsepower	5
Cycles	4
Cylinders	1
Bore	2-9/16 In.
Stroke	2-7/8 In.
Displacement	12.5 Cu. In.
Crankshaft	Horizontal
Starter	Manual Rewind or Electric
Ignition	High Tension Magneto
Governor	Adjustable Mechanical Type
Air Cleaner	Sealed Housing, Reusable Oiled Foam Element
Choke	Remote on Manual Start and Chokematic on Electric Start
Crankcase	Lubrication: Splash System Oil Capacity: 1-1/4 Pints
Fuel Capacity	3 Quarts
Muffler	Quiet, Rear Discharge

TRANSMISSION

Type	All Gear, Fully Enclosed and Lubricated
Speeds	Two Forward, One Reverse
Speed Range	Low: 2.37 MPH High: 3.14 MPH Reverse: 2.37 MPH
Differential	Type: All gear, fully enclosed and lubricated

ROTARY MOWER

Mounting	Suspended from and Tilts with Front Axle
Width of cut	26 Inches
Height of cut	1-1/2 Inches to 3-3/4 Inches
Drive	Cushioning V-Belt with Lever Control
Adjustment	Single Knob Controls Front and Rear Height
Spindles	Sealed Rolling Contact Bearing Mounted
Rear Support	Three Rollers, 2 at 2", 1 at 3-15/16" Wide
Housing	Drawn Steel, Deep Deck, Height above blade in clipping channel area increases from 2-1/2 to 4 Inches above blade.

CHASSIS

Frame	Heavy Gauge Steel with Main Pivot Below Seat
Rear Wheels	Pneumatic, Inflation Pressure: 10 Lbs. Size: 4.80/4.00 x 8
Front Wheels	Pneumatic, Inflation Pressure: 22 to 25 lbs. Size: 4.10/3.50 x 4 Bearings: Powdered Iron, with Grease Fittings
Seat	Type: Bucket, Rubber Mounted Cover: Leatherette on Bonded Foam
Turning Radius	Inside Rear Tire: 23 Inches Inside Mower Cut, Model 315: 30 Inches.
Stability	With wheel weights: 30% Uphill and Sidehill Slope Without wheel weights: 20% Uphill and Sidehill Slope

CONTROLS

Steering	Control: Steering Wheel Type System: 1 to 1 Ratio, Lever and Drag Link
Clutch and Brake Pedal	Location: Right Front Clutch: Soft Action, Touch-O-Matic, V-Belt Brake: Foot Operated Band Type
Gear Selector	Location: Front Center of Seat
Mower Clutch	Location: Left Side of Seat
Throttle Control	Location: Right Side of Engine
Starter and Choke	Location: Manual - Rear Right Side of Engine Location: Electric, Key under Right Side of Seat has chokematic

DIMENSIONS

Overall Length	58 Inches
Overall Width	Without Mower: 28-1/4 Inches With 26 Inch Mower: 36-1/16 Inches
Overall Height	To Top of Steering Wheel: 36-1/4 Inches To Top of Engine Cover: 29-1/4 Inches
Wheel Base	41-1/2 Inches
Shipping Weight	With 26 Inch Mower: 268 Lbs. Manual With 26 Inch Mower: 278 Lbs. Electric

MOW SAFELY

In addition to the basic safety rules listed on the inside front cover, follow these mowing safety tips.

1. Make sure the lawn is clear of sticks, stones, wire and other debris which could be thrown by the mower blade.

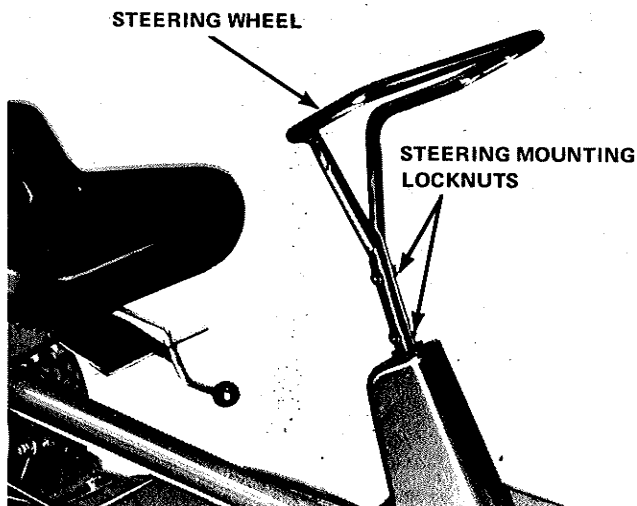
2. Make sure the transmission is set in "Neutral" and the mower drive is **DISENGAGED** before starting the engine. (See "Controls".)

3. Before mowing the first time, check the mower height setting. Because of variations in hitch positions, the cutting height must be properly adjusted. (See "Cutting Height" under "Adjustments".)

4. Whenever you stop mowing, either to remove obstacles or make adjustments, stop and think before you dismount. *Disengage the mower drive, shift to "Neutral", then shut off the engine.* If you are on a driveway or other smooth, flat spot, the mower blades will continue spinning for a short time. To dismount, place your feet well away from the mower housing.

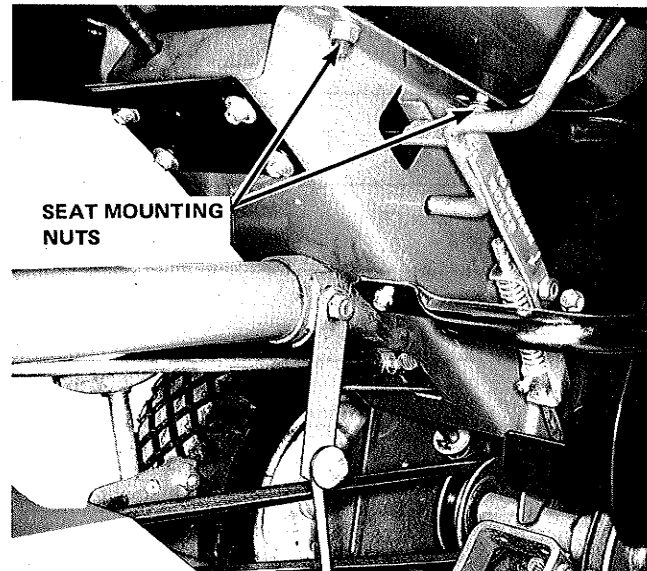
STEERING WHEEL

The steering shaft has two sets of holes for mounting the steering wheel. Practice and experience will determine which of the two positions is most convenient. In order to adjust the steering wheel height, remove the two mounting locknuts, pull out the bolts and reposition the steering wheel over the other set of holes. **DO NOT** allow the steering wheel end to strike the black plastic washer on the shaft. Reinstall the bolts and locknuts securely.



SEAT

The seat is also provided with two sets of mounting holes to allow repositioning from front to rear as desired. Remove the lower seat pan mounting nuts and lockwashers and relocate the rubber-mounted studs in the second set of holes. Retighten nuts securely.

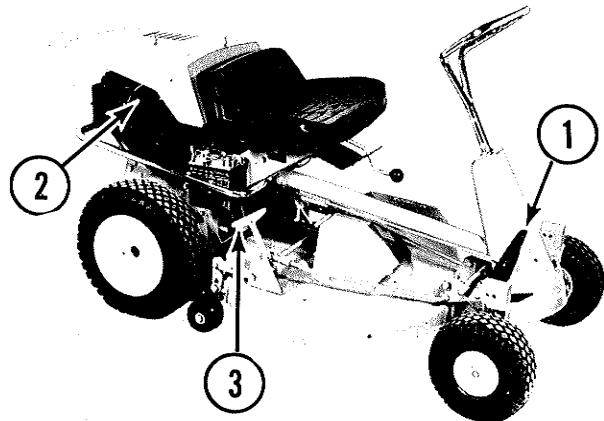


CONTROLS

1. **CLUTCH AND BRAKE FOOT PEDAL:** Push the pedal **DOWN** to declutch and apply brake simultaneously. Always depress the pedal to stop the unit before shifting gears.

2. **THROTTLE LEVER:** Move lever **FORWARD** to start and run, toward **REAR** to stop engine. Mowing is always done at 3/4 to full throttle.

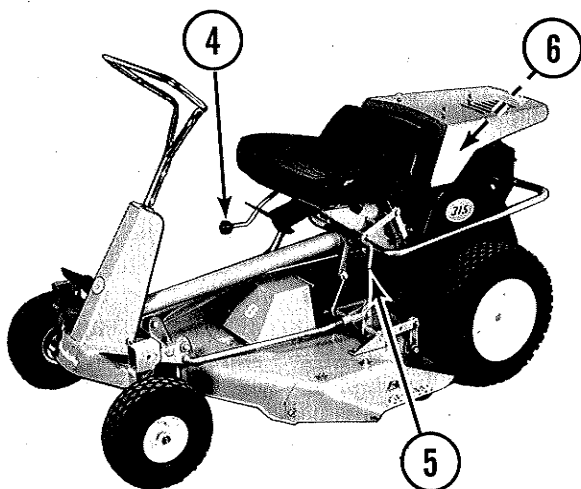
3. **MOWER HEIGHT ADJUSTER:** The height adjusting handle raises and lowers the mower at both front and rear. Turn the handle **CLOCKWISE** to raise, **COUNTERCLOCKWISE** to lower.



4. **GEAR SHIFT LEVER:** Depress the foot lever and place the shift lever in the desired notch on the shift plate. The lever is easy to move if used properly. *It slides back and forth, not up and down.* Apply rearward (not downward) pressure to shift. **DO NOT** try to shift gears unless the foot pedal is depressed.

5. **MOWER CLUTCH LEVER:** Pull the lever **UP** to engage the mower drive, push **DOWN** to disengage. The engine should be running at 3/4 to full power when the mower drive is engaged.

6. **STARTER AND CHOKE:** Located on the right side of the engine. (See "STARTING".)



BEFORE STARTING

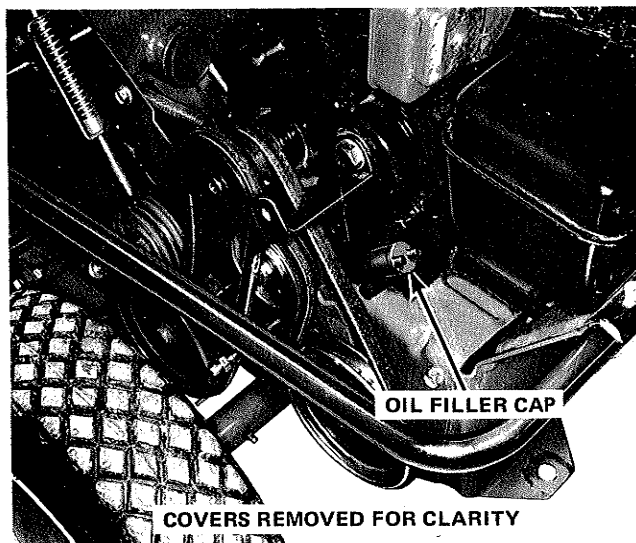
Before attempting to start the engine, read the engine owner's manual thoroughly. Be sure to have on hand sufficient quantities of clean, fresh "Regular" grade gasoline and 10W-30 grade MS motor oil.

NOTE

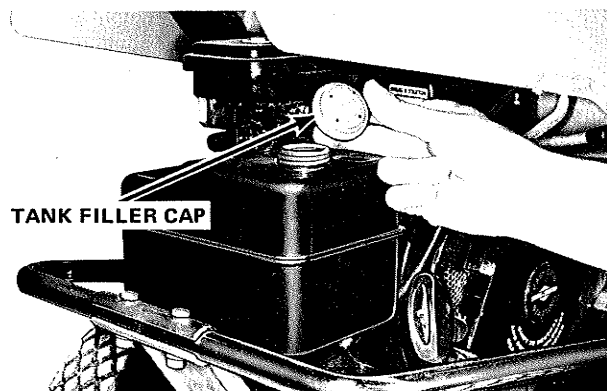
*Pay attention to "Service Designation" stamped on the top of each can of oil you intend using in your engine. Use oil labeled MS (Motor Severe), but do not use ML or MM labels as they do not contain sufficient additives for proper protection. Labels DL and DM may be used also; however, **DO NOT** use a DS label oil as it is too severe in detergent quality for this application. Be sure to use a premium grade oil.*

1. Remove the engine crankcase filler plug by turning counterclockwise. The plug is located at the rear left side of the engine. Fill the crankcase with 10W-30 grade MS oil until level with the top

of the filler neck. Wipe up any spilled oil. Reinstall the filler cap securely. **CHECK THE OIL LEVEL EVERY TIME FUEL IS ADDED.**



2. Remove the fuel tank filler cap and fill the tank completely with clean, fresh "Regular" grade gasoline. Use a can with a flexible spout.



DO NOT MIX OIL WITH GASOLINE.

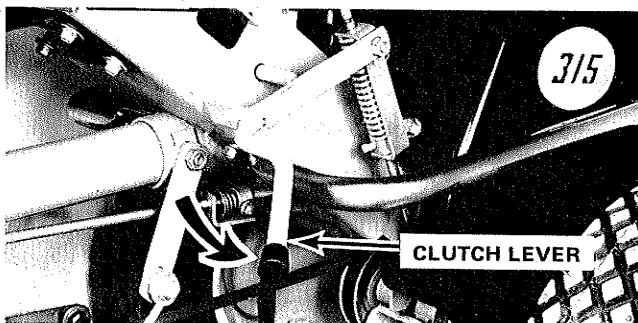
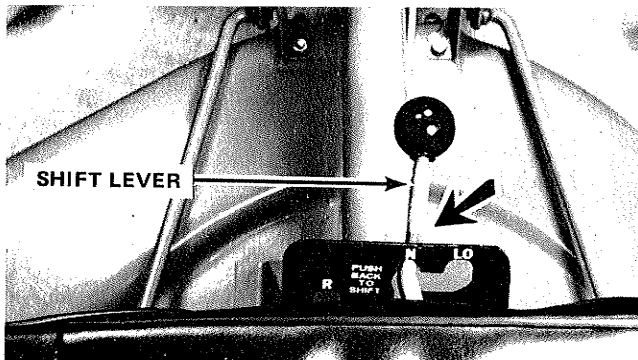
CAUTION

GASOLINE IS HIGHLY INFLAMMABLE. AVOID OVERFILLING AND WIPE UP ANY SPILLED FUEL. ALLOW NO OPEN FLAME, SMOKING OR MATCHES NEAR THE AREA WHEN REFUELING.

Replace the filler cap securely. Store gasoline in small quantities - prolonged storage produces harmful gum and deposits. If it is necessary to store gasoline for prolonged periods, add STA-BIL brand gasoline stabilizer, available at your Simplicity dealer. (See "OFF-SEASON STORAGE".)

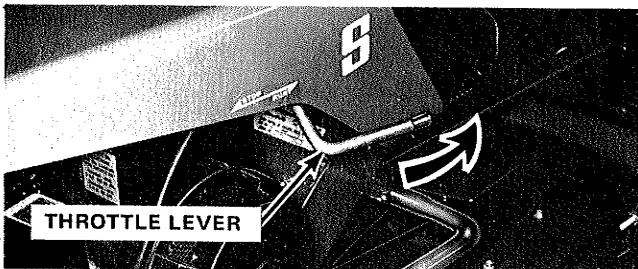
CAUTION

PLACE TRANSMISSION SHIFT LEVER IN NEUTRAL POSITION AND DISENGAGE THE MOWER DRIVE BY MOVING THE CLUTCH LEVER DOWN.



STARTING

1. Move the throttle lever forward about 2/3 way on manual and all the way on electric model. Turn key to start.

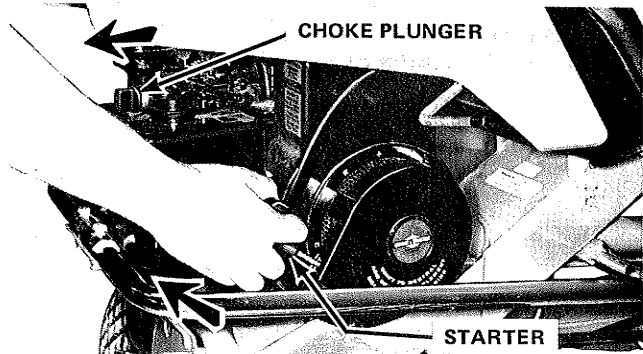


2. On the manual start models pull the choke plunger out to "CHOKE" position.

3. On the manual start models grasp the recoil starter handle firmly in your right hand and pull sharply straight out to start the engine. The horizontal crankshaft and upward-angled starter pull permit maximum use of body muscles so that anyone can start the Wonder Boy easily. After the engine starts, return the choke to "OFF" position. If the engine fails to start after 4 or 5 pulls it may be flooded. Return the choke to "OFF" position and pull recoil starter handle to clear the excess fuel. Always open the choke to start, whether the engine is warm or cold.

DO NOT RELEASE THE STARTER HANDLE WITH THE ROPE EXTENDED. Return the handle to the cover by hand.

4. (Electric Start) Locate the ignition switch under the right side of the seat. Insert the ignition key and turn it clockwise until the starter actuates. When the engine starts, release the key and move the speed control lever slightly rearward so the engine is no longer choked.



5. Mowing is always done at 3/4 to full throttle. Use the foot pedal and transmission to control ground speed. To stop the engine on manual start models, move the throttle lever all the way to the rear. On electric start models, turn the ignition key counter-clockwise until it is vertical and remove it to prevent unauthorized starting.

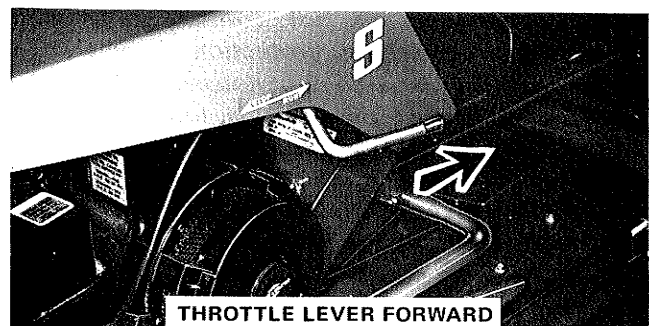
BEFORE OPERATING

Check the tire pressure. Inflate front tires to 22 to 25 psi. Inflate rear tires to 10 psi.

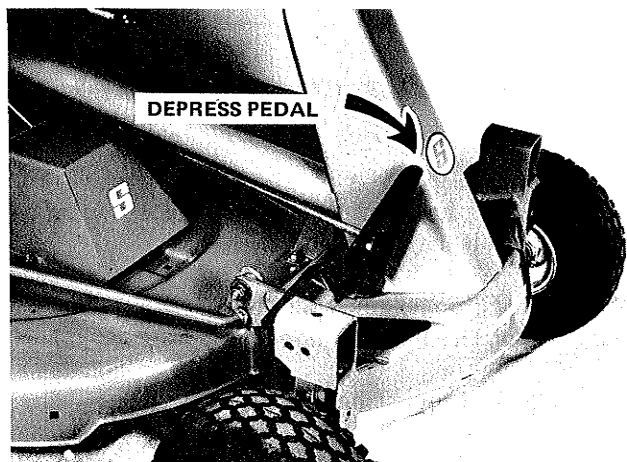
The Wonder Boy is lubricated at the factory, but before operating all grease fittings and other lubrication points should be serviced. See "Maintenance" for instructions.

Before beginning to mow, you should familiarize yourself fully with the sequence of operation. Proceed as follows:

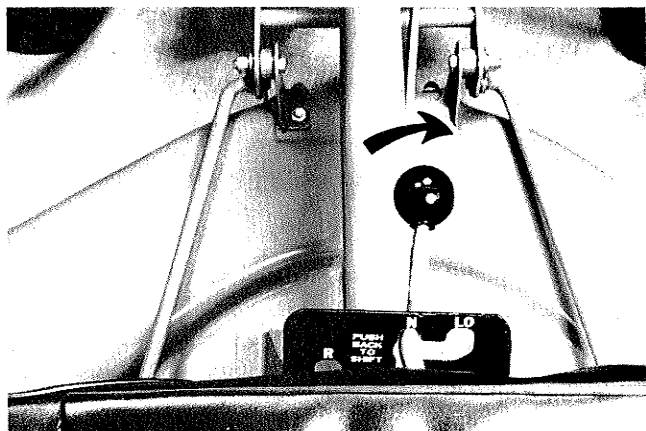
1. With engine running, the shift lever in neutral, and the mower clutch lever disengaged as shown in "STARTING", seat yourself on the mower and move the throttle lever forward to give full engine speed.



2. Depress the clutch-brake pedal. This disengages the transmission for shifting and applies the brake at the same time.



3. Have the front wheels centered straight ahead and hold the steering wheel with one hand. Move the shift lever to HI or LO as desired. Remember to push rearward *not* downward on the shift lever.



CAUTION

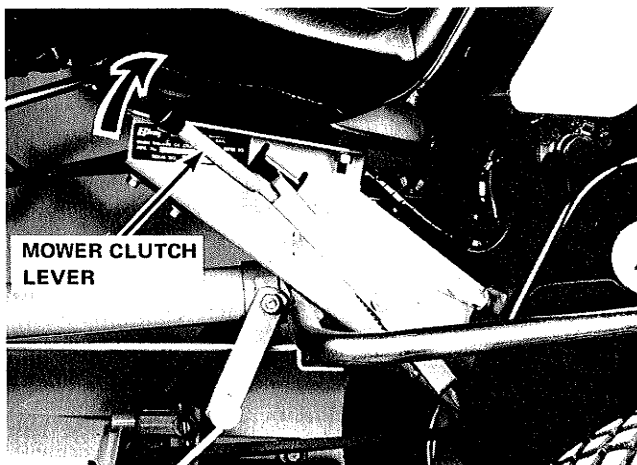
CHANGE GEARS ONLY WHEN MACHINE IS MOTIONLESS AND FOOT PEDAL IS DEPRESSED.

4. Gradually release the foot pedal to start moving. Drive on level ground until you get the "feel" of the machine. To stop forward motion quickly, depress the pedal. Try slower throttle settings, shift gears, practice steering and handling until you are ready to start mowing. To stop, depress the foot pedal, shift to neutral position and move the throttle lever back to stop the engine.

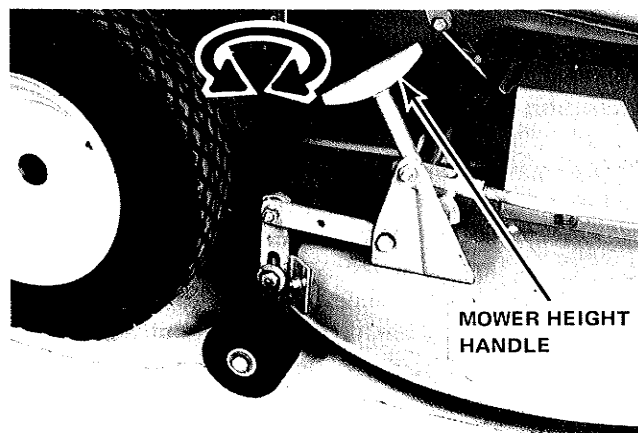
5. Before mowing, the cutting height adjustment of the mower must be checked. Move the machine onto a flat surface such as a driveway and check the cutting height settings as outlined under "ADJUSTMENTS".

OPERATION

1. Engage the mower blade drive by pulling the clutch control lever *UP*. The engine must be running at 3/4 to full throttle speed.



2. The height adjusting handle at the rear right side of the mower housing raises and lowers the mower at both front and rear. Twist the handle *CLOCKWISE* to *RAISE* the blade and *COUNTERCLOCKWISE* to *LOWER* it.



3. Most lawns should be mowed to keep the height of the grass approximately 2 in. high. Under dry conditions, it should be allowed to grow higher. To keep a green lawn, *NEVER* mow more than one-third off the height of the grass or a maximum of 1 in. in one mowing. For extremely tall grass, set the cutting height at *MAXIMUM* for the first mowing, then reset to the desired height and mow again.

4. The 26 in. mower is designed to cut grass at a height of 1-1/2 to 3-3/4". Best results are obtained by cutting often and not too short. Allow the grass to grow to 3 in., then cut off only the top 1 in.

MOWING PATTERN

For the first use of the mower, choose a smooth, level area. Cut long, straight strips overlapping slightly. After getting used to the operation, proceed to inclines or rough ground.

Guide the right side of the mower along trees, posts or other obstacles and follow the contour as closely as possible.

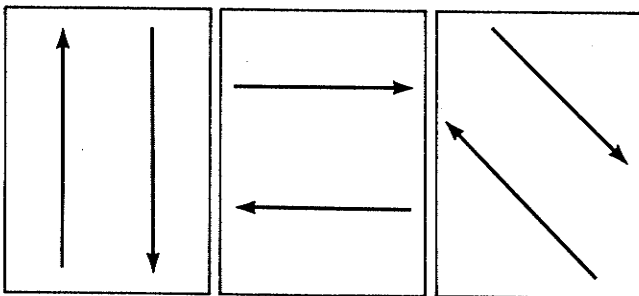
DISPERSAL: If the clippings are to remain on the lawn, mow with the discharge side toward the area already cut. If the clippings will be raked up later and the grass is at a normal height of 3 in. or less, it is practical to disperse the clippings into the un-cut area. There they will be concentrated in the center of the lawn for minimum raking.

WET, THICK OR HEAVY GRASS: Start at the outer edge of the area and mow counterclockwise so that clippings are always deposited on cut grass. Less engine power is required and a more even cut free of streaks will result.

HEIGHT SETTING: On thick or springy grass, do not set the cutting height too low. The wheels may sink into the lawn, resulting in too short a cut. (See "ADJUSTMENTS".)

For best appearance, new grass should be cut in the afternoon or evening when it is free of moisture.

Change patterns occasionally to eliminate matting, graining and a corrugated appearance. See diagrams below. To collect lawn clippings, a trailing lawn sweeper is available from your Simplicity dealer. See page 17. Remember to allow the clippings to dry out for several hours before sweeping.



FRONT TO BACK

SIDE TO SIDE

DIAGONAL

CAUTION

IF YOU FEEL SEVERE VIBRATION WHEN MOWING, THE BLADE IS UNBALANCED. HAVE IT BALANCED BEFORE FURTHER USE. (SEE "MAINTENANCE".)

TROUBLE SHOOTING

For instructions to overcome the following problems, see "ADJUSTMENTS" and "MAINTENANCE".

IF ENGINE FAILS TO START, check the following:

1. Throttle lever must be 2/3 way forward on manual and all the way on electric.
2. Choke plunger must be in "CHOKE" position if engine appears to be flooded.
3. Shift lever must be in "NEUTRAL" position.
4. Mower clutch lever must be down in "DIS-ENGAGED" position.
5. Spark plug cable must be securely connected.

IF BELT SLIPPAGE OCCURS, check the following:

1. Belts may be stretched or excessively worn.
2. Pulleys may be greasy or oily.
3. Insufficient belt tension due to a broken or worn tension spring.
4. If the 26 in. mower drive belt jumps off the pulley when clutch is engaged or disengaged, there may be too much belt slack or the mower idler pulley belt guards are out of position. See page 11.

IF A BELT BREAKS, check the following:

1. Look for sharp edges or rough spots on pulleys.
2. Pulleys may be misaligned.
3. Belt tension may be too tight.

IF HANDLING IS DIFFICULT, check the following:

1. Controls or drive systems may be out of adjustment. See pages 11 and 12.
2. Tires under-inflated. Inflate front tires to 10 lbs., rear tires to 22 to 25 lbs.
3. Wheels spinning on slopes. Wet grass is very slippery - mow in the late afternoon after it has dried. Wheel weights may be added to provide additional traction. See your Simplicity dealer.

IF AN UNEVEN CUT RESULTS, check the following:

1. Mower may not be adjusted properly. See "Cutting Height" below.
2. Mower housing may be bent or damaged.
3. Blade arbor tube may be bent.
4. Uneven cut from side to side with the 26 in. mower may result from mower not being properly leveled. See page 9.

IF A POOR OR ROUGH LOOKING CUT RESULTS, check the following:

1. Blade may need sharpening.
2. Grass may be too high or gone to seed.
3. Drive belt may be slipping.
4. Mower may be out of adjustment.
5. Engine speed may be too low. Run at 3/4 to full throttle.

IF VIBRATION OCCURS, check the following:

1. Arbor shaft or tube (or both) may be bent.
2. Blade may be unbalanced.
3. Drive pulley may be bent or misaligned.

For instructions on removal and installation of the mower unit, see "MAINTENANCE".

ADJUSTMENTS

CUTTING HEIGHT: Move the mower onto a flat, smooth surface.

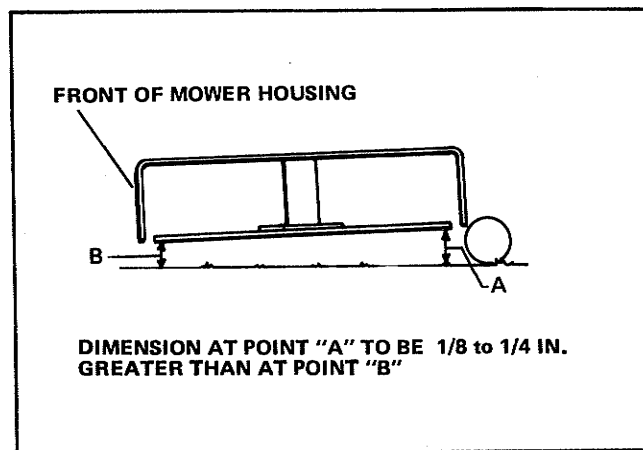
CAUTION

BE SURE ENGINE IS NOT RUNNING, TRANSMISSION IS IN NEUTRAL AND MOWER DRIVE IS DISENGAGED (CLUTCH LEVER DOWN). BLOCK THE WHEELS, FRONT AND REAR, TO PREVENT ROLLING WHILE WORKING ON THE MOWER BLADE.

26 INCH MOWER

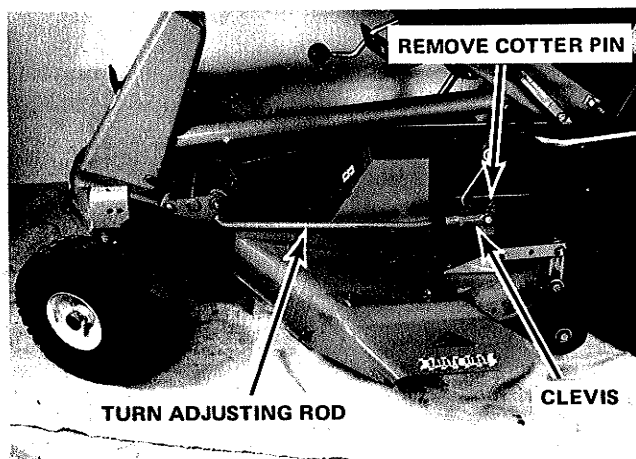
1. Rotate the blade by hand so that it is positioned with blade tips pointing to front and rear.

2. Measure the distance from the blade tip to the ground. The dimension at point "A" in the diagram must be 1/8 to 1/4 in. greater than at point "B".



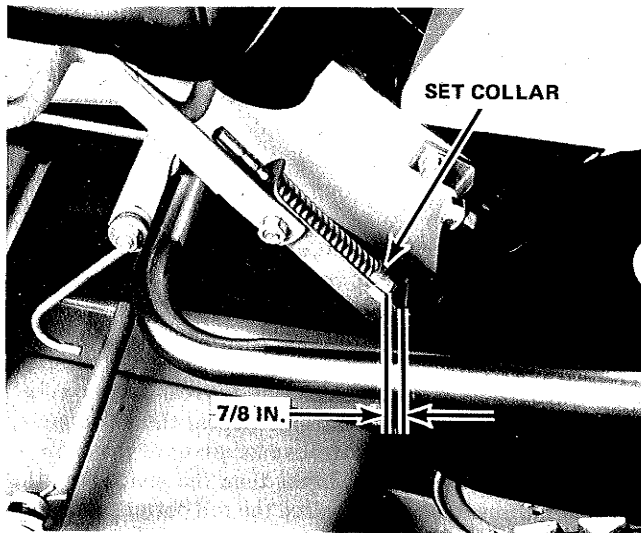
In certain types of grass and under extreme conditions, it may be necessary to adjust the blade so that the front and rear tip are near to level as opposed to the diagram above.

3. To raise or lower the front edge of the mower, remove the cotter pin from the adjusting rod on each side and disconnect the ends of the rods at the rear. To **RAISE** the front of the mower turn the clevis on the rod clockwise a few turns. To **LOWER** the front of the mower, turn the clevis counter-clockwise. Reinsert the clevis ends in the rear roller bracket holes and check the blade height. Repeat the adjustment, keeping both rods equal in effective length until the front of the mower blade is 1/4 in. lower than the rear. When the height adjustment is made, replace the rod cotter pins.

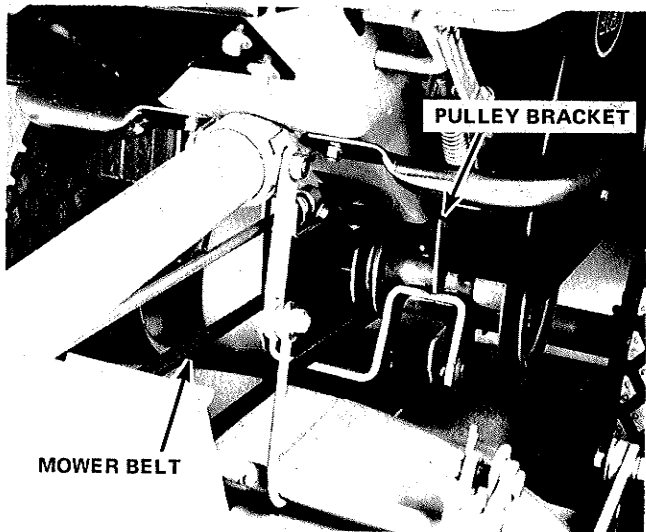


4. Raise or lower the entire mower by twisting the height adjustment handle until the front of the blade is at the cutting height desired.

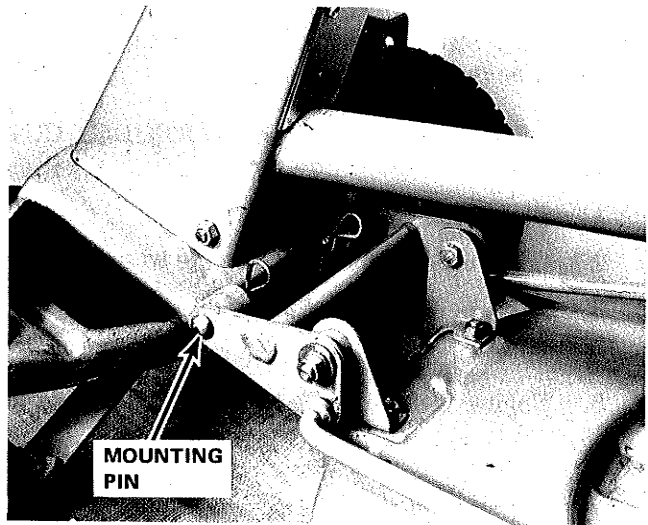
MOWER CLUTCH LEVER: When the mower drive is engaged (lever up), there should be about 1/2 in. clearance between the clutch rod set collar and the lower ear of the rod bracket. Loosen the set screw in the collar to adjust. **DO NOT** adjust the set collar to completely compress the spring. If the driving belt is stretched so much that adjustment cannot be made with the collar, the mower must be repositioned further forward. To do this, proceed as follows:



1. Disengage the clutch lever (push down).
2. Pull the power take-off pulley bracket forward against the spring tension enough to slip the belt off the pulley.

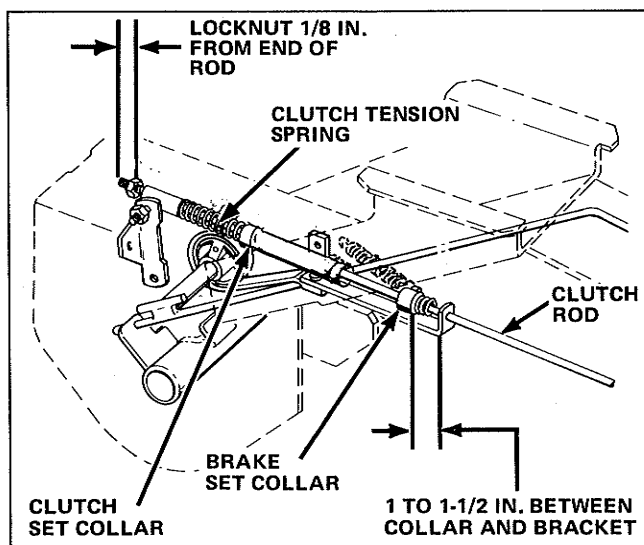


3. Remove the front mower hitch mounting pins, line up the hitch with the forward set of holes on the frame and reinstall the pins.

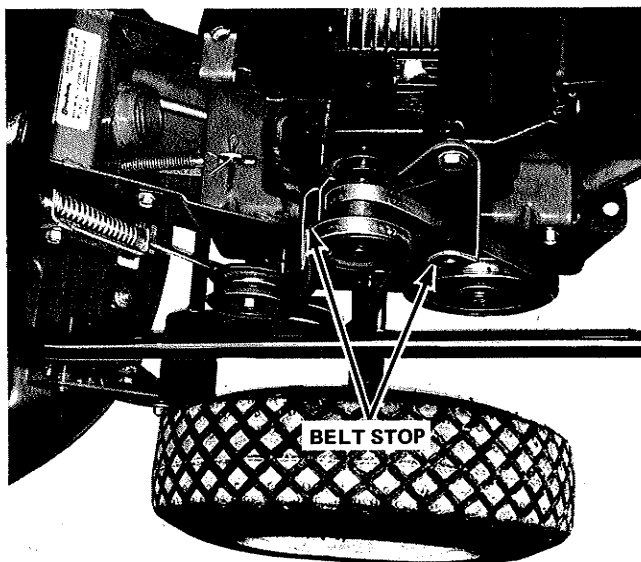


4. Reinstall the mower drive belt. Be sure the belt is correctly installed and properly seated in the pulley grooves. (See "MAINTENANCE - belt replacement".) Check the clutch lever operation. The set collar may require readjustment to the 1/2 in. dimension.

CLUTCH AND BRAKE PEDAL: The correct adjustment of the combination clutch and brake pedal linkage is vital to smooth machine motion and braking. With the brake pedal *UP*, position the rod brake set collar to between 1 and 1-1/2 in. from the bracket ear. Loosen the collar set screw, position the collar and retighten the set screw securely. Adjust the clutch set collar so that the clutch rod tension spring is preloaded 1/16 in. Note that the clutch adjusting locknut is at the extreme rear of the rod inside the frame housing. Access to make the adjustment must be gained by removing the frame rear hitch plate or raising the rear wheels high enough off the ground for working room. The locknut must be positioned 1/8 in. from the end of the rod.



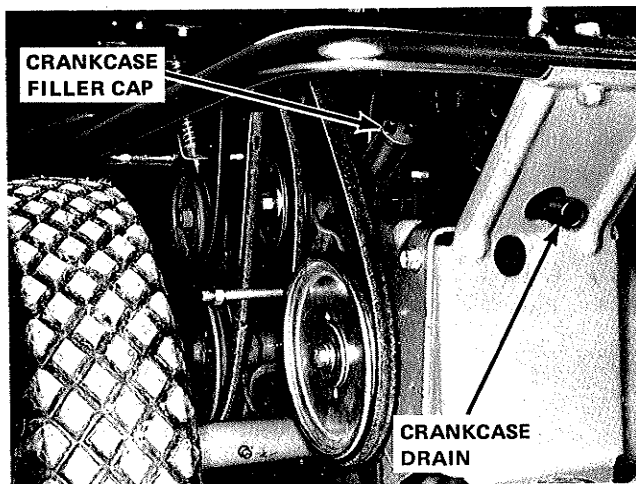
BELT STOP: Set the belt stop fingers by bending so there is about 1/16 in. clearance between stop and belt when the clutch is engaged. The belt stop can be repositioned slightly if necessary by loosening the mounting bolt.



MAINTENANCE

ENGINE: Follow the regular procedures outlined in the engine owner's manual. Check the crankcase oil level every time fuel is added or every 5 operating hours. Change the crankcase oil and service the air cleaner every 20 operating hours.

1. The crankcase should be drained when the engine is warm. Remove the cap from the drain pipe at the rear of the unit to drain. Replace the cap securely and fill the crankcase with clean 10W-30 grade MS motor oil.



2. Turn the screw on the air cleaner cover counterclockwise to loosen. Remove cover. Wash the foam air cleaner element in gasoline, squeezing several times and dry it thoroughly. Saturate it with engine oil, squeeze several times to remove the excess and reinstall.

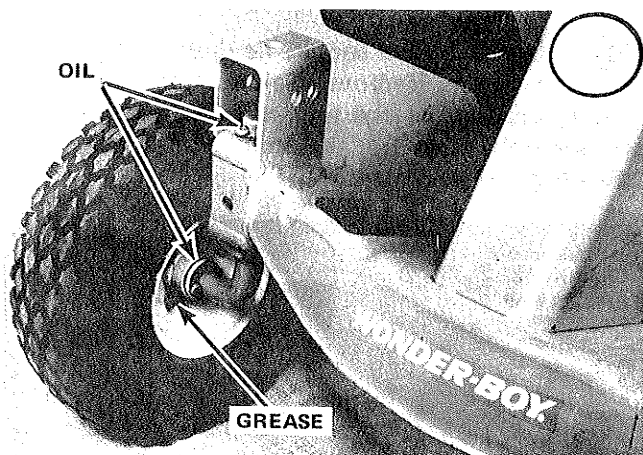
3. Thoroughly clean all clippings, dirt and chaff from the cooling fins on the cylinder and head to prevent damage from overheating.

4. Clean and re-gap the spark plug every 100 operating hours. Gap to .030 in. **DO NOT** clean the plug by sandblasting - this process often leaves a residue of grit in the plug which can cause engine damage. **BRIGGS AND STRATTON CORP. WILL NOT HONOR THE WARRANTY ON ANY ENGINE DAMAGED BY GRIT FROM A SANDBLASTED SPARK PLUG.** Clean the plug with solvents, scraping or using a wire brush, then re-gap. If a plug cannot be cleaned sufficiently by these methods, it should be discarded.

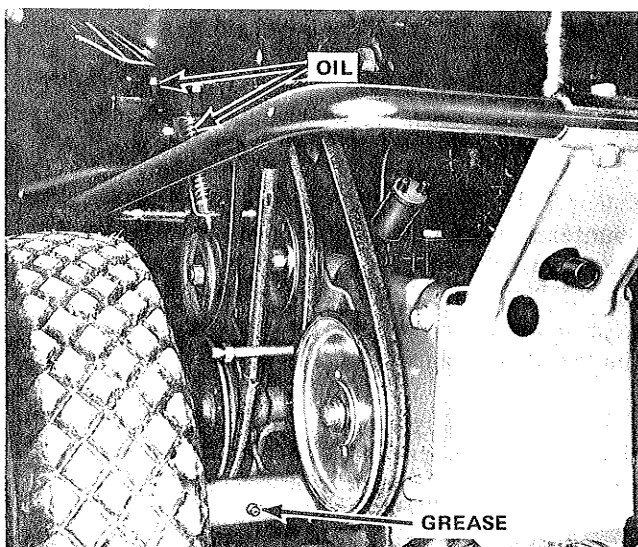
GREASE FITTINGS: There are five grease fittings on the machine, located as shown. Grease all fittings every 10 operating hours. Use a Lithium-based, general purpose automotive grease. Remove all dirt, grit and paint from the fittings before application.

Apply light engine oil at the points indicated every 10 operating hours. Do not allow oil to drip onto belts or pulley grooves.

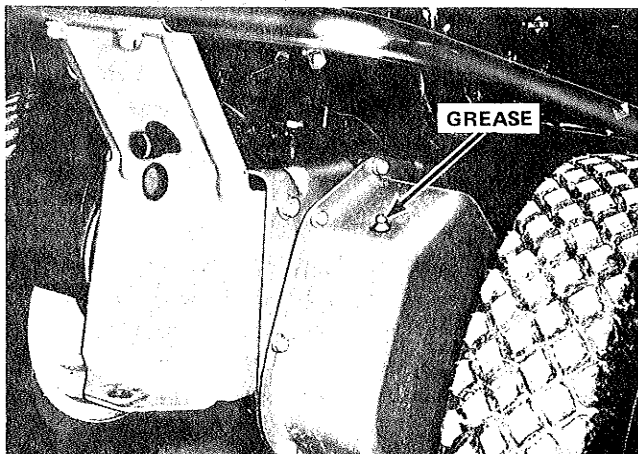
1. Grease both front wheel bearings. Oil wheel spindles and steering linkages.



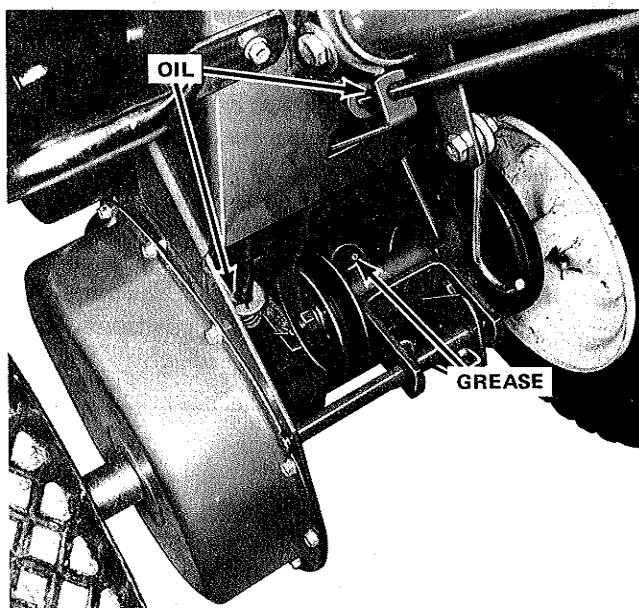
2. Grease rear axle shaft on left side. Oil mower clutch lever pivot shaft and rod.



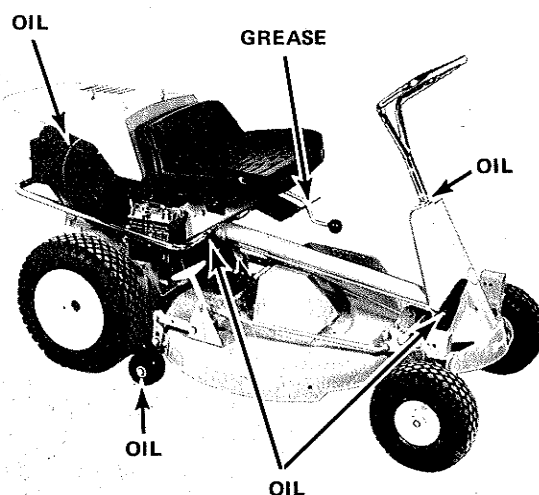
3. Grease fitting on top of transmission housing.



4. Grease power take-off pulley shaft. Oil all joints and sleeves of shift linkage and brake-clutch linkage.



5. Grease shift lever where it touches plate. Oil pedal pivot, height adjusting handle, choke plunger, frame main pivot and steering shaft.

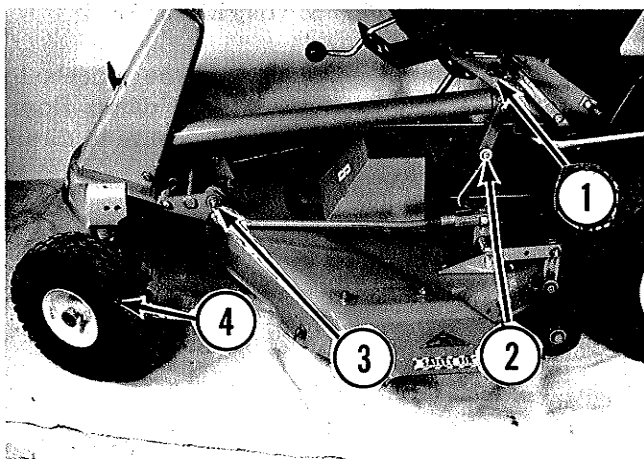


MOWER: Remove and install the mower unit as follows:

1. Declutch the mower drive by pushing the clutch lever *DOWN*. Pull the power take-off pulley and shaft assembly forward to allow enough slack to slip the belt off.
2. Disengage the rear mower suspension hook. Pull up on the rear lever crossbar and swing the hook to the rear.

3. Pull out the front mounting pin spring clips and knock out the pins. Proceed with care - when the pins are removed, the mower will be free to drop to the ground.

4. Turn the front wheels all the way to the right and slide the mower out from under the frame toward the left side.



To install the mower unit, attach the front pins first, then the rear hook. Be sure the clutch is disengaged before reinstalling the belt. Check to see the belt is installed correctly and seated properly in the pulleys. (See "BELT REPLACEMENT".)

Clean all grass clippings and material from the housing. Rotate the blade by hand to see that the ends are level with each other. Inspect the blade closely after each mowing. Sharpen or remove small nicks with a file or stone. Deep nicks in the cutting edge can only be corrected by grinding, which requires that the blade be balanced. For this service, see your Simplicity dealer or proceed as follows:

BLEAD REPLACEMENT

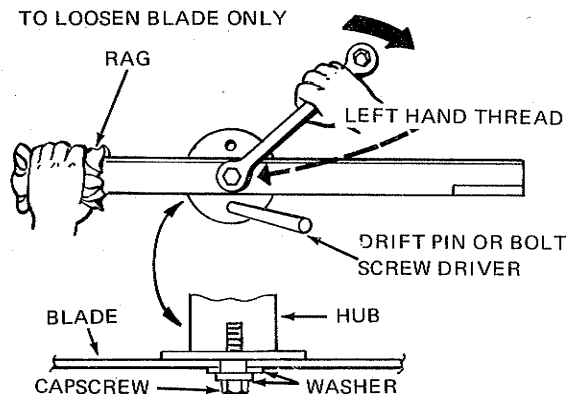
Do not attempt to remove the blade until you have the correct size box, socket, or open end wrenches for the blade mounting bolts. To remove the blade, place a small bolt, punch, or similar object through one of the holes in the mower arbor assembly so you can prevent the nut from turning by holding the blade.

CAUTION

Always use several layers of folded cloth or a leather glove over the hand when holding the blade.

The nut has left hand threads, so must be turned as shown in the drawing to loosen.

TO LOOSEN BLADE ONLY



NOTE

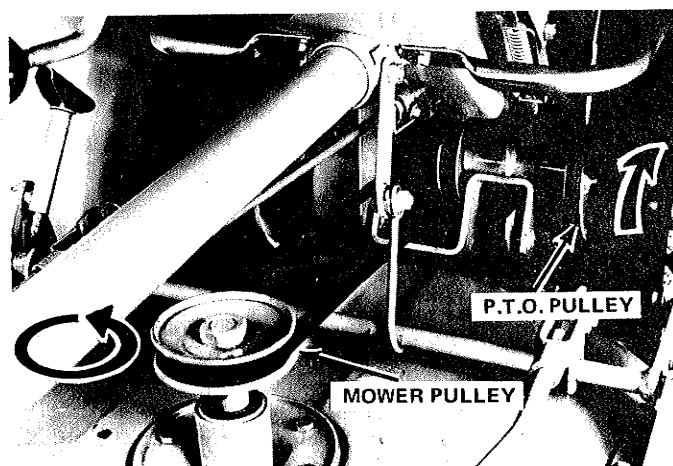
DO NOT remove the center arbor. Remove the blade from the arbor. To sharpen the blade yourself, clamp it in a vise and use a 10 in. file along the original bevel. File to a razor edge. To balance, insert a knife blade or small rod through center hole to see if blade rests with both ends balancing evenly. File heavy side until even.

CAUTION

ALWAYS HANDLE THE BLADE WITH CARE TO AVOID INJURY.

Carefully clean the blade and arbor. Install the new or sharpened blade with the lift tabs toward the top. Install the blade mounting screw and tighten to 50 ft. lbs. torque. Use a cloth or glove to prevent injury to your hand when holding the blade for tightening. Rotate the blade by hand slowly to see that it clears the housing all around and the tips are running true.

26 IN. MOWER BELT REPLACEMENT: It is essential that the mower belt be correctly installed. See illustration. Note that the belt must run from the *TOP* of the power take-off pulley to the *RIGHT* side of the mower pulley and from the *LEFT* side of the mower pulley to the *BOTTOM* of the power take-off pulley.



If oil has been spilled on any of the belts, use Energine or a similar cleaning fluid on a rag to clean it. An alternate method is to sprinkle a handful of Drizit or Kitty-Litter compound on the belt while running.

If the mower is properly adjusted and in apparent good condition but seems to require excess engine power, it may be that the arbor shaft or sleeve has been damaged by hitting an obstruction. Check the blade drive system. The rotor spindle (or spindles) should turn with 1 to 2 lbs. pull on the blade with the drive belt removed. If the pull pressure exceeds 2 lbs., the unit is robbing power from the engine. Tight bearings, a bent arbor shaft or spindle housing can be repaired or replaced by your Simplicity dealer.

GENERAL REPAIRS: To prevent rusting, sand off and paint any parts or areas which become chipped or damaged. Apply a good rust preventive to all bare metal parts. Tighten all fasteners and guards securely.

OFF-SEASON STORAGE

1. Drain the fuel tank completely by running the engine until it stops. If desired, fuel can be stored in containers or in the tank by using STA-BIL brand gasoline stabilizer, available at your Simplicity dealer. Add a can capful to the fuel in the tank or follow the directions on the can for containers of other capacity. This additive prevents formation of gum and varnish for up to one year, providing easier starting and a clean fuel system.



2. Drain and refill crankcase while engine is warm. (See "MAINTENANCE".)

3. Remove spark plug, pour 1 oz. 10W-30 oil into cylinder through plug hole. Crank engine a few times to distribute oil. Reinstall plug.

4. Clean dirt and chaff from cylinder head fins and engine housing.

5. Apply grease to all fittings and light engine oil to all points listed in "MAINTENANCE".

6. Block the machine up off the wheels to relieve weight and keep tires off a damp floor. Protect the tires from prolonged exposure to direct sunlight.

7. Store the machine in a dry place indoors.

STARTING AFTER STORAGE

1. Remove the spark plug and wipe it dry. Crank the engine a few times to blow the excess oil out of the plug hole, then reinstall the plug.

2. Fill the fuel tank completely with fresh "Regular" gasoline.

3. Service the air cleaner. (See "MAINTENANCE".)

4. Check the crankcase oil level and replenish if necessary. See page 5.

5. Start the engine and let it run slowly. *DO NOT* run at high speed immediately after starting. Run the machine outdoors or in a well-ventilated area.

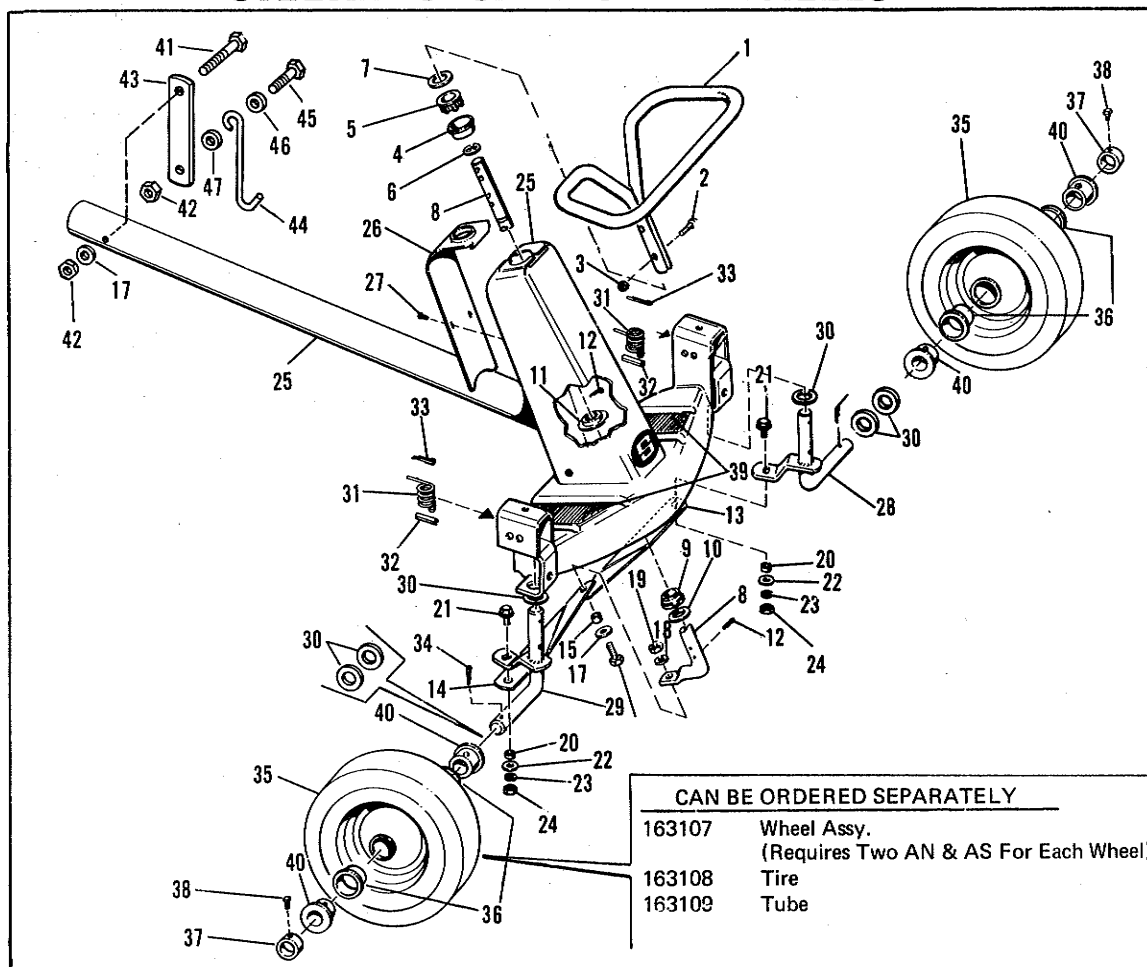
6. Inflate the tires to operating pressure. (See "SPECIFICATIONS".)

SERVICE

For replacement parts, engine service, blade sharpening or balancing, see your Simplicity dealer. Be sure that anyone who ever may operate the mower reads the owners manual thoroughly.

USE ONLY SIMPLICITY BELTS AND BLADES.

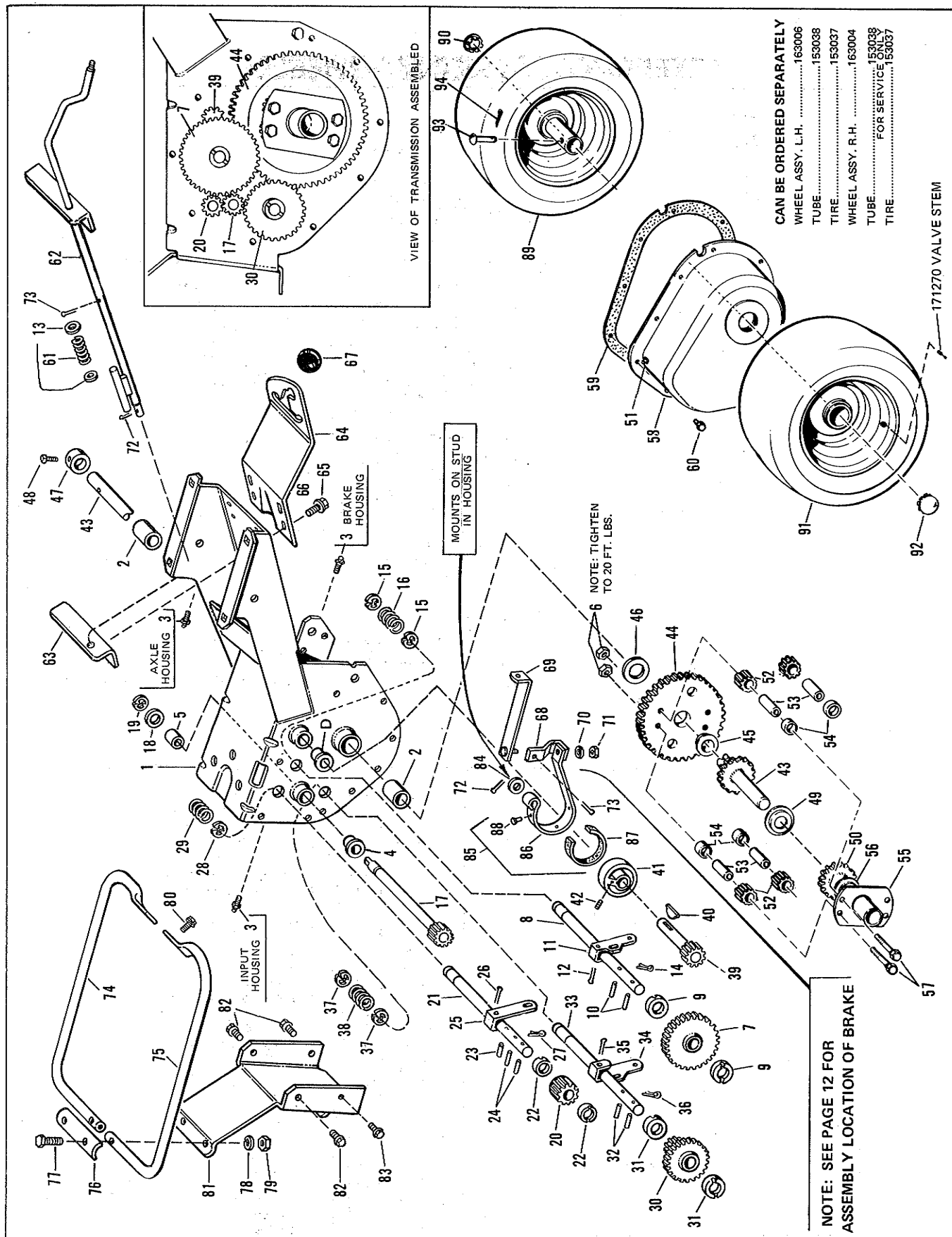
STEERING & FRONT WHEELS



Ref. Let.	Part No.	Description
1	158574	Steer. Handle Ass'y.
2	705018	Hex. Cap Screw 5/16" - 18 x 1 1/2" lg.
3	717511	Full Lock Hex. Nut, 5/16" - 18
4	158222	Steer. Bushing Cup
5	157077	Steering Bushing
6	154264	Retaining Ring
7	158223	Washer
8	158520	Steering Shaft
9	159026	Bushing
10	108181	Washer
11	158012	Steering Shaft Cup
12	722014	Cotter Pin, 5/32" Dia. x 1-1/4"
13	158225	L.H. Steering Link
14	158226	R.H. Steering Link
15	158227	Spacer
16	705009	Hex. Cap Screw, 3/8 - 16 x 1-1/2"
17	719001	Plain Washer, 3/8"
18	720002	Lock Washer, 3/8"
19	717003	Full Hex. Nut, 3/8" - 16
20	153081	Spacer
21	715061	Whiz Lock Flange Hex. Screw, 3/8" - 16 x 1"
22	719001	Plain Washer, 3/8"
23	720002	Lock Washer, 3/8"

Ref. Let.	Part No.	Description
24	717003	Full Hex. Nut, 3/8" - 16
25	174646	Front Frame & Axle Ass'y.
26	158215	Steering Support Cover
27	714004	Self Tapping Screw, No. 10 x 3/8"
28	158545	L.H. Spindle Ass'y.
29	158547	R.H. Spindle Ass'y.
30	101022	Washer
31	121011	Torsion Spring
32	723001	Roll Pin, 5/16" Dia. x 1-1/4"
33	722015	Cotter Pin, 5/32" Dia. x 1"
34	722003	Cotter Pin, 3/16" Dia. x 1-1/4"
35	163106	Front Wheel & Tire Ass'y.
36	163110	Wheel Bearing (For Service)
37	8021010	Set Collar
38	713503	Hollow Hd. Cup Pt. Set Screw, 5/16" - 18 x 5/16"
39	158428	L.H. & R.H. Foot Pad
40	163111	Bearing Relief (For Service)
41	715104	Hex. Cap Screw, 3/8" - 16 x 3"
42	717510	Full Hex. Lock Nut, 3/8"
43	158613	Bracket 170184 (F/355 Only)
44	174934	Lift
45	705005	Hex. Cap Screw, 3/8" - 16 x 1"
46	719001	Plain Washer, 3/8"
47	159134	Plastic Washer, 3/8"

TRANSMISSION & REAR WHEELS



CAN BE ORDERED SEPARATELY

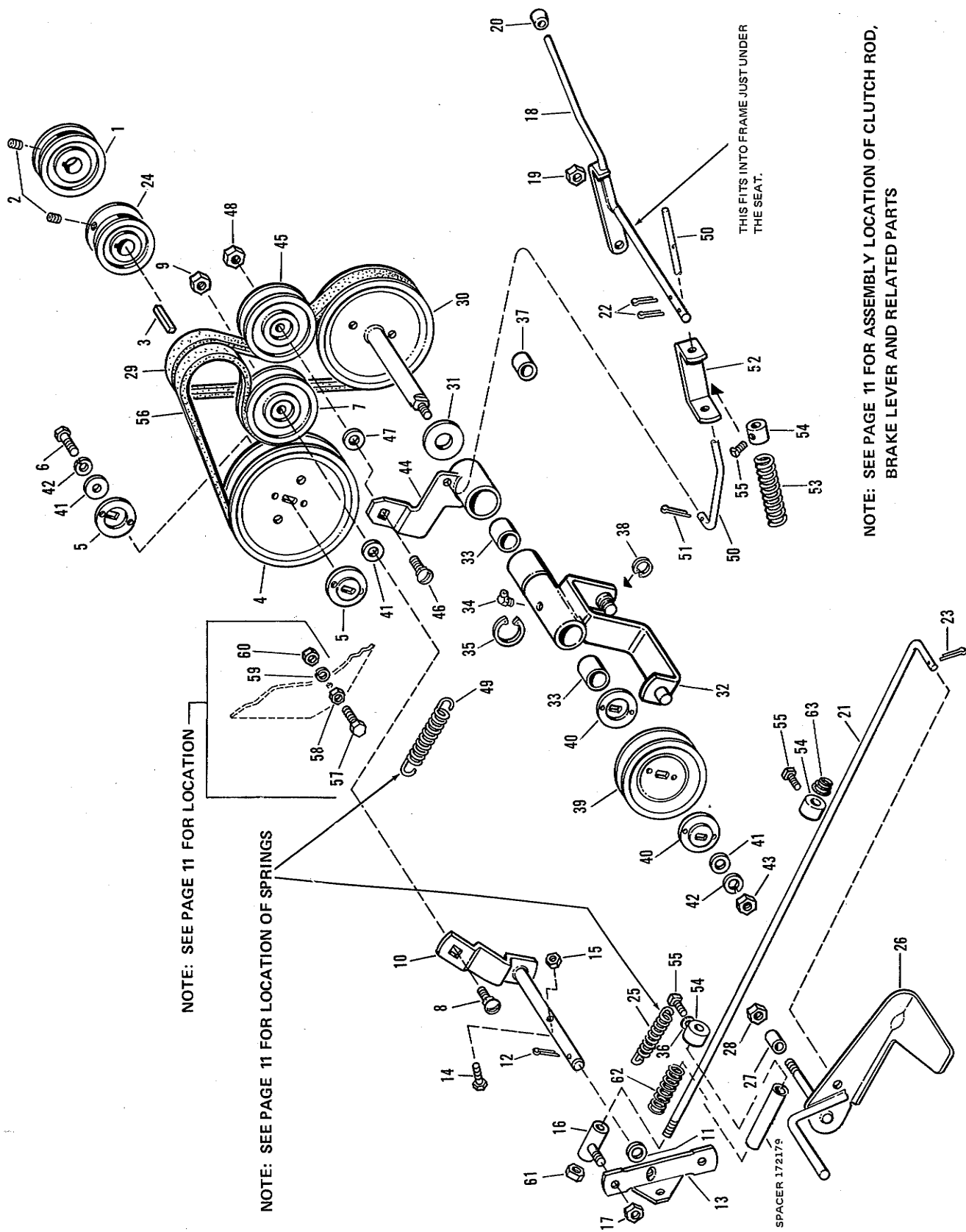
WHEEL ASSY, L.H.	163006
TIRE	153038
TIRE	153037
WHEEL ASSY, R.H.	163004
TIRE	153038
FOR SERVICE ONLY	153037

TRANSMISSION & REAR WHEELS

Ref. No.	Part No.	Description
1	174935	Engine Base Frame & Seat Support Assembly
2	158337	Bearing
3	727002	Grease Fitting
4	158569	Bronze Bearing
5	8051083	Bearing
6	717510	Nut Hex. Lock 3/8" - 16 N.C.
7	158542	Lo Gear & Bearing Assembly
8	158541	Interm. Lo Shaft
9	158561	Thrust Collar
10	723004	Roll Pin, 1/8" - 1
11	158563	Link Shift Lo
12	722003	Cotter Pin, 3/16" x 1 1/4"
13	8051056	Washer - Spacer
14	722001	Cotter Pin, 3/32" x 3/4"
15	158596	Retaining Ring
16	158578	Compression Spring
17	106944	Gear Shaft Assembly
18	153079	Washer
19	153124	Retaining Ring
20	158557	Reverse Pinion
21	158534	Reverse Shaft
22	158562	Thrust Collar
23	723014	Roll Pin, 5/32" - 1"
24	723016	Roll Pin
25	158564	Reverse Link Shift
26	722003	Cotter Pin, 3/16" x 1 1/4"
27	722017	Cotter Pin, 1/16" x 3/4"
28	158596	Retaining Ring
29	158578	Compression Ring
30	158570	Gear & Bearing Assembly High
31	158561	Thrust Collar
32	723004	Roll Pin, 1/8" - 1"
33	158541	Inter. High Shaft
34	158535	High Link Shift
35	722003	Cotter Pin, 3/16" x 1 1/4"
36	722001	Cotter Pin, 3/32" x 3/4"
37	158596	Retaining Ring
38	158578	Compression Spring
39	158548	Brake Shaft & Gear Assembly
40	725505	Hi Pro Key
41	165067	Brake Drum
42	713503	Cup Pt. Socket Hd. Set Screw
43	158352	L.H. Axle Shaft Assembly
44	158530	Drive Gear
45	158356	Drive Gear Bushing
46	118252	Washer
47	158357	Set Collar

Ref. No.	Part No.	Description
48	713002	Cup Pt. Sq. Hd. Set Screw
49	158358	Thrust Cup
50	158359	R.H. Axle & Bushing Assembly
51	727003	Grease Fitting
52	158579	Diff. Pinion
53	121083	Diff. Pinion Spindle
54	121084	Diff. Spacer
55	158364	Diff. Plate
56	158365	Diff. Plate Bushing
57	715043	Hex. Cap Screw, 3/8" - 16 x 2 1/2"
58	158521	Gear Case Assembly
59	158524	Gear Case Gasket
60	715067	Taptite Screw, 1/4" - 20 x 3/8"
61	158576	Spring
62	172917	Shift Rod Assembly
63	158539	Shift Rod Guide
64	172923	Shift Pattern Plate
65	715085	Taptite Screw, 1/4" - 20 x 3/4"
66	719006	Plain Flat Washer, 1/4"
67	9021050	Shift Knob
68	158555	Brake Lever
69	158597	Brake Guide Assembly
70	720003	Lock Washer, 1/4"
71	717005	Full Hex. Nut, 1/4" - 20
72	722006	Cotter Pin, 1/8" x 1"
73	722003	Cotter Pin, 3/16" x 1 1/4"
74	158583	L.H. Rear Handle
75	174629	R.H. Rear Handle
76	158584	Handle Support Bracket
77	705018	Hex. Cap Screw 5/16" - 18 x 1 1/2"
78	720001	Lock Washer, 5/16"
79	717001	Full Hex. Nut, 5/16" x 18
80	715090	Taptite Screw, 1/4" - 20 x 1/2"
81	158518	Rear Hitch Plate
82	715083	Taptite Screw 5/16" - 18 x 1/2"
83	715090	Taptite Screw, 1/4" - 20 x 1/2"
84	719002	Plain Washer, 3/8"
85	158552	Brake Band Assembly
86	158554	Brake Band
87	156136	Brake Lining
88	724502	Rivet
89	163005	L.H. Wheel & Tire Assembly
90	158433	Plug Button
91	163003	R.H. Wheel & Tire Assembly
92	158436	Plug Button
93	118053	Pin
94	722009	Cotter Pin, 1/8" x 3/4"

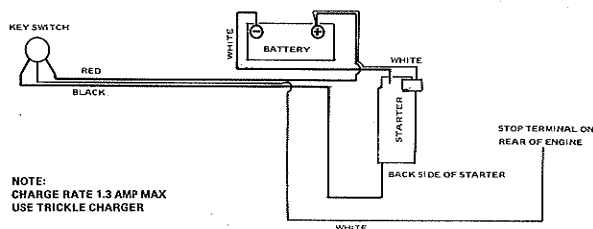
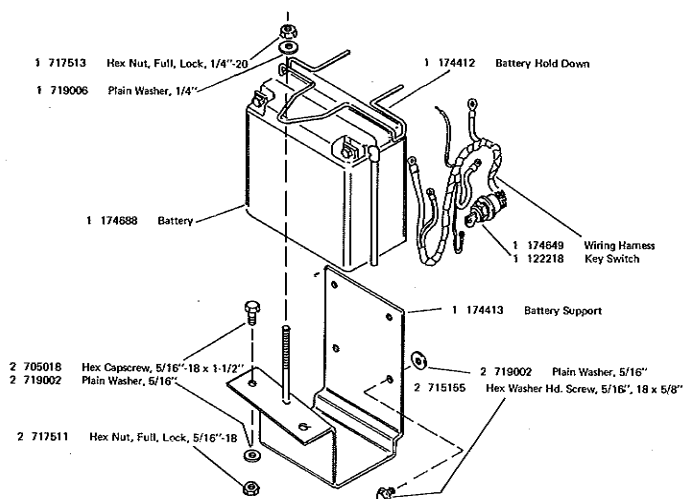
BELTS & PULLEYS



BELTS & PULLEYS

Ref. No.	Part No.	Description
1	118331	Engine Pulley
2	713053	Setscrew, 5/16" - 18 x 5/16"
3	8221042	Engine Pulley Key
4	158377	Pulley (Transmission)
5	158378	Special Washer
6	715073	Hex. Cap Screw, 5/16" - 18
7	154534	Idler Pulley (Transmission Drive)
8	703003	Carriage Bolt, 3/8" - 16 x 1"
9	717510	Full Hex. Lock Nut, 3/8"
10	158537	Idler Pulley Arm Assembly
11	719003	Plain Washer, 7/16"
12	722006	Cotter Pin, 1/8" Dia. x 1"
13	158536	Brake & Clutch Lever
14	715051	Hex. Cap Screw, 1/4" - 20 x 1"
15	717513	Full Hex. Lock Nut, 1/4" - 20
16	156303	Rod Guide Assembly
17	717511	Full Lock Hex. Nut, 5/16" - 18
18	158603	P.T.O. Control Handle Assembly
19	717511	Full Lock Hex. Nut, 5/16" - 18
20	158437	Knob
21	158575	Transmission Clutch Rod
22	722006	Cotter Pin, 1/8" Dia. x 1"
23	722001	Cotter Pin, 3/32" Dia. x 3/4"
24	158498	Pulley Transmission Drive
25	159159	Spring
26	158604	Foot Pedal Assembly
27	158388	Spacer
28	717510	Full Lock Hex. Nut, 3/8" - 16
29	121398	"V" Belt
30	158630	Pulley & Shaft Assembly
31	119018	Washer
32	158632	Housing Assembly

Ref. No.	Part No.	Description
33	108054	Needle Bearing
34	727004	Grease Fitting
35	158396	Retaining Ring
36	719007	Plain Washer
37	158398	Spacer
38	158399	Retaining Ring
39	158400	Pulley (Mover Drive)
40	158378	Special Washer
41	719002	Plain Washer, 5/16"
42	720002	Lock Washer, 3/8"
43	717003	Full Hex. Nut, 3/8" - 16
44	158461	Idler Lever Assembly
45	154534	Idler Pulley
46	703003	Carriage Bolt, 3/8" - 16 x 1"
47	719002	Plain Washer, 5/16"
48	717510	Full Lock Hex. Nut, 3/8" - 16
49	154369	Spring (P.T.O.)
50	158609	P.T.O. Clutch Rod
51	722001	Cotter Pin, 3/32" Dia. x 3/4"
52	158406	Rod Guide Assembly
53	163103	Spring
54	8191022	Set Collar
55	713001	Set Screw, 1/4" - 20 x 3/8"
56	158573	V-Belt Transmission Drive
57	705018	Hex. Cap Screw, 5/16" - 18 x 1-1/2"
58	717511	Full Lock Hex. Nut, 5/16" - 18
59	720001	Lock Washer, 5/16"
60	717001	Full Hex. Nut, 5/16" - 18
61	717525	Elastic Stop Nut
62	157041	Spring, Compression
63	153010	Spring

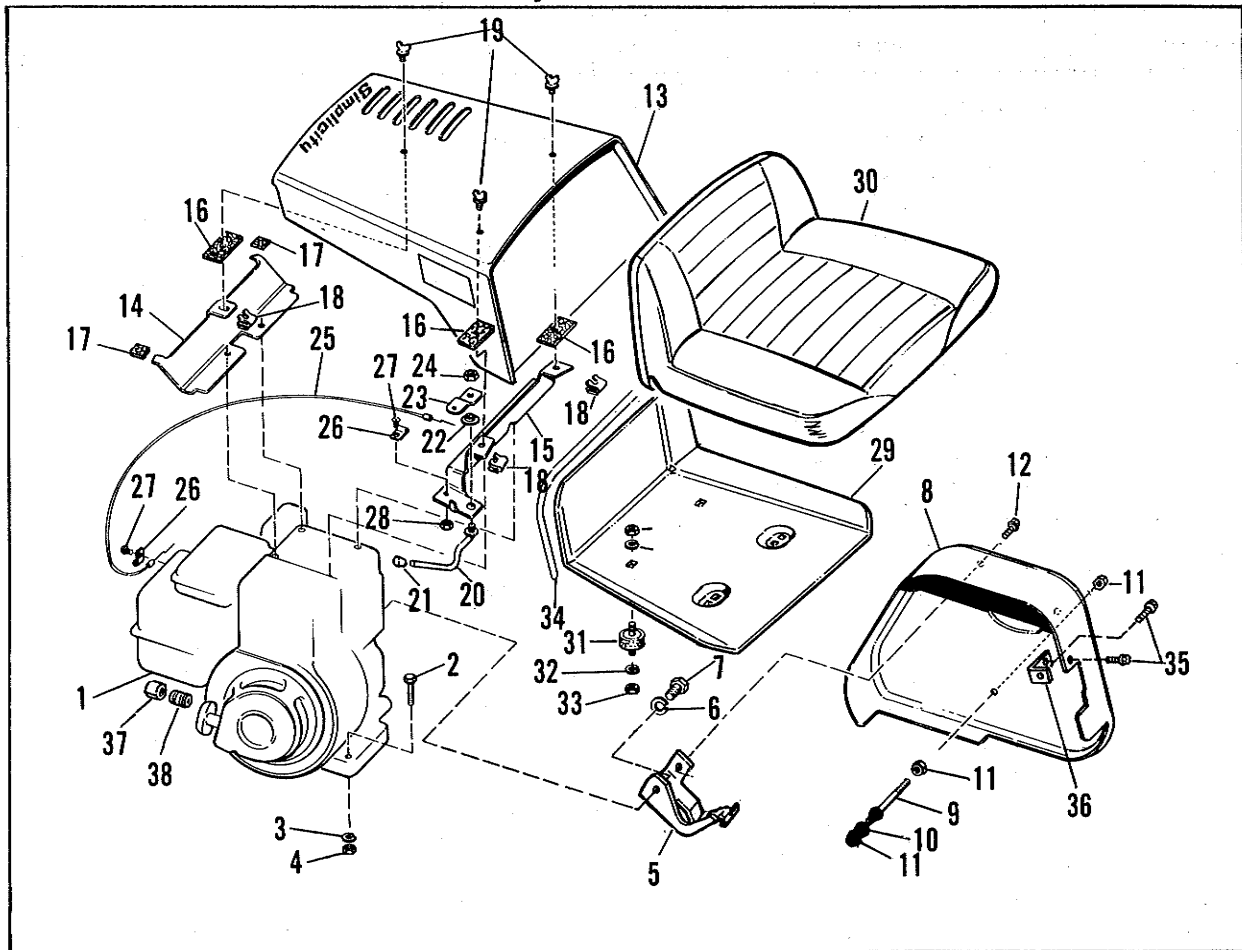


26" ROTARY MOWER

Ref. No.	Part No.	Qty. Req.	Description
1	1602181	1	Housing, 26"
2	174810	1	Arm Assembly
3	1602193	1	Bracket, Pivot, L.H.
4	174714	1	Bracket, Pivot, R.H.
5	702022	4	Bolt, Carriage Std. 5/16"-18 x 5/8"
6	720001	4	Lock Washer, 5/16"
7	717001	4	Hex Nut Full, 5/16"-18
8	108415	1	Screw Assembly, Adj.
9	108512	1	Pivot
10	722016	1	Pin, Cotter, 3/32" x 5/8"
11	108287	1	Socket Assembly, Crank
12	717510	1	Full Hex Lock Nut, 3/8"-16
13	719001	1	Plain Washer, 3/8"
14	1603145	1	Anchor Housing, Pivot, L.H.
15	1603146	1	Anchor Housing, Pivot, R.H.
16	702022	4	Carriage Bolt, Std., 5/16"-18 x 5/8"
17	720001	4	Lock Washer, 5/16"
18	717001	4	Hex Nut Full, 5/16"-18
19	1602228	2	Spacer, Pivot
20	174863	1	Bellcrank Assembly
21	719001	2	Plain Washer, 3/8"
22	705009	2	Hex Cap Screw, 3/8"-16 x 1-1/2"
23	720002	2	Lock Washer, 3/8"
24	717003	2	Hex Nut Full, 3/8"-16
25	174814	2	Rod, Adjusting
26	118053	2	Pin
27	106788	2	Clip, Hair Pin
28	722006	2	Cotter Pin, 1/8" x 1"
29	157631	2	Yoke, End Adjusting
30	154305	2	Pin, Yoke
31	918196	2	Pin, Quick
32	1602211	2	Bracket, Roller Support
33	702022	4	Carriage Bolt, St., 5/16"-18 x 5/8"
34	720001	4	Lock Washer, 5/16"
35	717001	4	Hex Nut Full, 5/16"-18
36	1607603	2	Support Assembly, Roller
37	1602186	4	Bolt, Shoulder
38	719003	4	Plain Washer, 7/16"
39	720002	4	Lock Washer, 3/8"

Ref. No.	Part No.	Qty. Req.	Description
40	717003	4	Hex Nut Full, 3/8"-16
41	919387	4	Plain Washer
42	722011	4	Cotter Pin, 3/16" x 1"
43	1603206	2	Roller Assembly, 3-1/2"
44	1603204	1	Bracket, Center Roll
45	702022	2	Carriage Bolt Std., 5/16"-18 x 5/8"
46	720001	2	Lock Washer, 5/16"
47	717001	2	Hex Nut Full, 5/16"-18
48	108431	1	Roller Assembly
49	1603205	1	Shaft, Center Roller
50	118240	2	Ring, Retaining
51	1603349	1	Arbor Tube Assy. W/Bearings
52	1602259	1	Arbor Tube Assy.
53	108202	2	Bearing, Ball
54	1602265	1	Spacer
55	108472	2	Washer
56	705017	6	Hex Cap Screw, 5/16"-18 x 3/4"
57	719002	6	Plain Washer, 5/16"
58	720001	6	Lock Washer, 5/16"
59	717001	6	Hex Nut Full, 5/16"-18
60	174603	1	Arbor Assembly
61	174900	1	Spacer
62	725006	1	Key, Woodruff No. 61
63	174910	1	Pulley, Mower
64	717517	1	Hex Jam Nut, 3/4"-16
65	1605661	1	Blade, Mower
66	1605933	1	Hex Head Cap Screw
67	1605745	1	Washer, Shoulder
68	1605746	1	Washer, Belleville
69	103031	1	Decal, Safety
70	1601919	1	Transfer, Patent
71	108405	1	Decal, S
72	172980	1	Decal, Safety
73	108507	1	Film, Safety
74	174911	1	Belt, Mower Drive
75	174869	1	Cover, Belt
76	174820	1	Deflector
77	702022	5	Carriage Bolt Std., 5/16"-18 x 5/8"
78	719002	5	Plain Washer, 5/16"
79	720001	5	Lock Washer
80	717001	5	Hex Nut Full, 5/16"-18

ENGINE, SEAT & HOOD



Ref. No.	Part No.	Description
1		Engine B & S
2	705018	Hex Cap Screw, 5/16"-18 x 1-1/2"
3	720001	Lock Washer, 5/16"
4	717001	Full Hex. Nut, 5/16"-18
5	158527	Belt Stop Ass'y. 170165 (355 Only)
6	721506	Lock Washer, 1/2"
7	706010	Hex. Cap Screw, 1/2"-20 x 3/4"
8	158577	Pulleys Guard
9	158418	Pulley Guard Stud
10	720001	Lock Washer, 5/16"
11	717001	Full Hex. Nut, 5/16"-18
12	715083	Taptite Screw, 5/16"-18 x 1/2"
13	158515	Hood Ass'y.
14	158449	Rear Hood Support
15	174746	Front Hood Support
16	121399	Felt Gasket
17	158450	Felt Gasket
18	718030	Retainer Nut
19	715037	Thumb Screw

Ref. No.	Part No.	Description
20	158587	Handle (Throttle Control)
21	159112	Knob
22	159107	Throttle Washer
23	158424	Throttle Arm
24	717510	Full Lock Hex. Nut, 3/8"-16
25	158425	Cable & Wire Ass'y. (Throttle)
26	158475	Clip
27	710004	Hd. Rd. Mach. Screw, No. 10 - 32 x 3/8"
28	717007	Full Hex. Nut, No. 10 - 32
29	165066	Seat Panel
30	162094	Seat Pad
31	159085	Cushion Connector
32	720001	Lock Washer, 5/16"
33	717001	Full Hex. Nut, 5/16 - 18
34	159177	Tape 2 feet per pan
35	715083	Taptite Screw, 5/16" - 18 x 1/2"
36	158611	Pulley Guard Bracket
37	726502	Cap
38	158610	Pipe Nipple